Datasheet for ABIN3095020

RIPK1 Protein (AA 1-671) (His tag)

1 Image

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Overview

Quantity:	1 mg
Target:	RIPK1
Protein Characteristics:	AA 1-671
Origin:	Human
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This RIPK1 protein is labelled with His tag.
Application:	SDS-PAGE (SDS), Western Blotting (WB), ELISA, Crystallization (Crys)

Product Details

Sequence:	MQPDMSLNVI KMKSSDFLES AELDSGGFGK VSLCFHRTQG LMIMKTVYKG PNCIEHNEAL LEEAKMMNRL RHSRVVKLLG VIIEEGKYSL VMEYMEKGNL MHVLKAEMST PLSVKGRIIL EIIEGMCYLH GKGVIHKDLK PENILVDNDF HIKIADLGLA SFKMWSKLNN EEHNELREVD GTAKKNGGTL YYMAPEHLND VNAKPTEKSD VYSFAVVLWA IFANKEPYEN AICEQQLIMC IKSGNRPDVD DITEYCPREI ISLMKLCWEA NPEARPTFPG IEEKFRPFYL SQLEESVEED VKSLKKEYSN ENAVVKRMQS LQLDCVAVPS SRSNSATEQP GSLHSSQGLG MGPVEESWFA PSLEHPQEEN EPSLQSKLQD EANYHLYGSR MDRQTKQQPR QNVAYNREEE RRRRVSHDPF AQQRPYENFQ NTEGKGTAYS SAASHGNAVH QPSGLTSQPQ VLYQNNGLYS SHGFGTRPLD PGTAGPRVWY RPIPSHMPSL HNIPVPETNY LGNTPTMPFS SLPPTDESIK YTIYNSTGIQ IGAYNYMEIG GTSSSLLDST NTNFKEEPAA KYQAIFDNTT SLTDKHLDPI RENLGKHWKN CARKLGFTQS QIDEIDHDYE RDGLKEKVYQ MLQKWVMREG IKGATVGKLA QALHQCSRID LLSSLIYVSQ N

Product Details

	Sequence without tag. Tag location is at the discretion of the manufacturer. If you have a special request, please contact us.
Characteristics:	• Made in Germany - from design to production - by highly experienced protein experts. • Human RIPK1 Protein (raised in Insect Cells) purified by multi-step, protein-specific process to ensure crystallization grade. • State-of-the-art algorithm used for plasmid design (Gene synthesis). This protein is a made to order protein and will be made for the first time for your order. Our experts in the lab will ensure that you receive a correctly folded protein. The big advantage of ordering our made-to-order proteins in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified. In the unlikely event that the protein cannot be expressed or purified we do not charge anything (other companies might charge you for any performed steps in the expression process for custom-made proteins, e.g. fees might apply for the expression plasmid, the first expression experiments or purification optimization). When you order this made-to-order protein you will only pay upon receival of the correctly folded protein. With no financial risk on your end you can rest assured that our experienced protein experts will do everything to make sure that you receive the protein you ordered. The concentration of our recombinant proteins is measured using the absorbance at 280nm. The protein's absorbance will be measured in several dilutions and is measured against its specific reference buffer. The concentration of the protein is calculated using its specific absorption coefficient. We use the Expasy's protparam tool to determine the absorption coefficient of each protein.
Purification:	Two step purification of proteins expressed in baculovirus infected SF9 insect cells: 1. In a first purification step, the protein is purified from the cleared cell lysate using three different His-tag capture materials: high yield, EDTA resistant, or DTT resistant. Eluate fractions are analyzed by SDS-PAGE. 2. Protein containing fractions of the best purification are subjected to second purification step through size exclusion chromatography. Eluate fractions are analyzed by SDS-PAGE and Western blot.
Purity:	>95 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.
Sterility:	0.22 µm filtered
Endotoxin Level:	Protein is endotoxin free.
Grade:	Crystallography grade

Target Details

Target:	RIPK1
Alternative Name:	RIPK1 (RIPK1 Products)
Background:	Serine-threonine kinase which transduces inflammatory and cell-death signals (programmed necrosis) following death receptors ligation, activation of pathogen recognition receptors (PRRs), and DNA damage. Upon activation of TNFR1 by the TNF-alpha family cytokines, TRADD and TRAF2 are recruited to the receptor. Phosphorylates DAB2IP at 'Ser-728' in a TNF-alpha-dependent manner, and thereby activates the MAP3K5-JNK apoptotic cascade. Ubiquitination by TRAF2 via 'Lys-63'-link chains acts as a critical enhancer of communication with downstream signal transducers in the mitogen-activated protein kinase pathway and the NF-kappa-B pathway, which in turn mediate downstream events including the activation of genes encoding inflammatory molecules. Polyubiquitinated protein binds to IKBKG/NEMO, the regulatory subunit of the IKK complex, a critical event for NF-kappa-B activation. Interaction with other cellular RHIM-containing adapters initiates gene activation and cell death. RIPK1 and RIPK3 association, in particular, forms a necrosis-inducing complex. {ECO:0000269|PubMed:11101870, ECO:0000269|PubMed:17389591, ECO:0000269|PubMed:19524512, ECO:0000269|PubMed:19524513}.
Molecular Weight:	76.9 kDa Including tag.
UniProt:	Q13546
Pathways:	NF-kappaB Signaling, Apoptosis, Caspase Cascade in Apoptosis, TLR Signaling, Activation of Innate immune Response, Inositol Metabolic Process, Positive Regulation of Endopeptidase Activity, Hepatitis C, Protein targeting to Nucleus, Toll-Like Receptors Cascades, Negative Regulation of intrinsic apoptotic Signaling, SARS-CoV-2 Protein Interactome, Ubiquitin Proteasome Pathway

Application Details

Application Notes:	In addition to the applications listed above we expect the protein to work for functional studies as well. As the protein has not been tested for functional studies yet we cannot offer a gurantee though.
Comment:	In cases in which it is highly likely that the recombinant protein with the default tag will be insoluble our protein lab may suggest a higher molecular weight tag (e.g. GST-tag) instead to increase solubility. We will discuss all possible options with you in detail to assure that you receive your protein of interest.
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	100 mM NaCL, 20 mM Hepes, 10% glycerol. pH value is at the discretion of the manufacturer.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	Unlimited (if stored properly)

Images

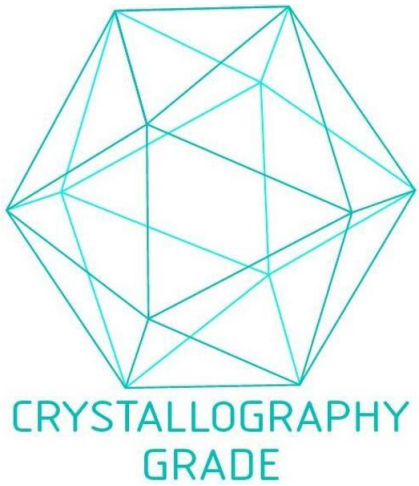

Image 1. „Crystallography Grade“ protein due to multi-step, protein-specific purification process